

- ☒ fossil energy
- ☐ environmental
- ☐ energy efficiency
- ☐ other

## NATURAL GAS ATLASES

### States Impacted:

Alabama, Alaska, Arkansas, Colorado, Kansas, Kentucky, Louisiana, Mississippi, New York, New Mexico, Ohio, Oklahoma, Pennsylvania, Tennessee, Utah, Virginia, West Virginia, Wyoming

### Benefit Areas:

Energy Independence, Oil and Gas Reserves, Exploration Cost Savings

### Participants:

Gas Research Institute, Texas Bureau of Economic Geology, Minerals Management Service, U.S. Geological Survey, National Research Council, West Virginia University

### FETC Contact:

Bill Gwilliam\*\*

Office: (304) 285-4401  
E-Mail: [wgwill@fetc.doe.gov](mailto:wgwill@fetc.doe.gov)

### MAIL ADDRESS:

\* U.S. Department of Energy  
P.O. Box 10940  
626 Cochran's Mill Road  
Pittsburgh, PA 15236-0940

\*\*U.S. Department of Energy  
P.O. Box 880  
3610 Collins Ferry Road  
Morgantown, WV 26507-0880

### WEBSITE:

[www.fetc.doe.gov](http://www.fetc.doe.gov)

### Description

A series of atlases showing the gas-producing regions of the U.S. provides a reliable, single source of geologic, engineering, and production data for drilling companies, geologists, and independent producers. Atlases are available for Texas, the Midcontinent, the Central and Eastern Gulf Coast, and the Rocky Mountain regions. Atlases for the Gulf of Mexico are being prepared.

The atlases are compiled by classifying and organizing reservoirs into plays (the productive areas in geologic formations), based on geological and engineering attributes such as reservoir properties, structural style, and hydrocarbon source. Over the past decade, DOE has contributed over \$2 million to a collaborative research project with the Gas Research Institute (GRI), the Minerals Management Service, and other industrial partners to develop a series of atlases for different gas producing regions of the United States.

### Goals

The goal is to compile a natural gas atlas series and database system that groups geologically age-defined regional trends of major oil and gas reservoirs into subregional reservoir play groups.

### Tangible Benefits

**National:** The atlases help ensure an abundant supply of domestic natural gas in the U.S. Atlases save prospective operators, producers, and consultants a significant amount of time and money by making it easier for them to develop analogs for their exploration, development, and/or research programs and by stimulating investment in the producing region. A GRI study of the impact of the atlases on the domestic gas industry concluded that the atlases have already saved users nearly \$12 million. The study projects savings of \$16 million by the year 2000. Over 4,000 of these atlases have been purchased to date.

**Regional:** The gas atlases are used to identify potential drilling sites that may have otherwise gone untapped by estimating the percent of wells and untapped play area in each state. These production estimates are critical to full development of the regional resource potential. For example, The *Atlas of Major Appalachian Gas Plays* includes cumulative production data estimates from the top 30 plays believed to exceed 43 trillion cubic feet (Tcf). An estimated 95 to 158 Tcf remain as proved reserves, probable resources, and undiscovered possible resources. Individual gas producing regions benefit from the atlases through increased development of their gas resources.